

WHAT IS CLAIMED IS:

1. A protein having a labeling compound attached to its C-terminal, in which said compound comprises a label portion comprising a label substance and an acceptor portion comprising a compound having an ability of binding to a C-terminal of a synthesized protein when protein synthesis is carried out in a cell-free protein synthesis system or in a living cell.
2. The protein according to claim 1, wherein said label portion comprises a radioactive substance or a non-radioactive label substance.
3. The protein according to claim 1, wherein said acceptor portion comprises a nucleic acid derivative.
4. The protein according to claim 1, wherein said acceptor portion comprises a compound in which a nucleic acid and an amino acid or an amino acid derivative are bound to each other.
5. The protein according to claim 1, wherein said acceptor portion comprises a compound in which 2'- or 3'-aminoadenosine or its derivative and an amino acid or an amino acid derivative are bound to each other.
6. The protein according to claim 1, wherein said acceptor portion comprises puromycin or its derivative.
7. A method for producing the protein as defined in claim 1, comprising the step of carrying out



analyzing a function of the labeled protein.

11. The method according to claim 9, wherein said analysis of the function of protein comprises determination of a protein-nucleic acid interaction.

12. The method according to claim 9, wherein said analysis of the function of protein comprises determination of an interaction between a protein and a ligand capable of specifically binding to the protein.